AMENDMENT

IN THE CLAIMS:

Please amend the claims as follows:

1-13. (Canceled)

14. (New) A method for the production of a membrane electrode unit for direct methanol fuel cells, which comprises

applying an anode catalyst layer to both an anode gas diffusion substrate and an ionomer membrane, and

applying a cathode catalyst layer directly to the ionomer membrane.

15. (New) The method of claim 14, wherein the anode catalyst layer has a thickness of between 20 and 200 micron.

16. (New) The method of claim 14, wherein the cathode catalyst layer has a thickness between 5 and 50 micron.

17. (New) The method of claim 14, wherein the anode catalyst layer has a precious metal loading of between 0.25 and 6 mg of precious metal/cm^2.

18. (New) The method of claim 14, wherein the cathode catalyst layer has a precious metal loading of between 0.1. and 2.5 mg of precious metal/cm^2.

19. (New) The method as claimed in claim 14, wherein supported or unsupported bi-metallic platinum/ruthenium catalysts are used as anode catalyst.

20. (New) The method as claimed in claim 14, wherein supported or unsupported platinum-

containing catalysts are used as cathode catalyst.

21. (New) A method for the production of a membrane electrode unit for direct methanol fuel cells, comprising:

(a) coating an anode gas diffusion substrate with an anode catalyst ink to form a coated anode gas diffusion substrate;

(b) drying the coated anode gas diffusion substrate;

(c) coating a first side of an ionomer membrane with a cathode catalyst ink;

(d) drying the first side of the ionomer membrane;

(e) coating a second side of the ionomer membrane with the anode catalyst ink;

(f) drying the second side of the ionomer membrane; and

(g) uniting the coated anode gas diffusion substrate with the ionomer membrane coated on both sides and with a cathode gas diffusion substrate.

22. (New) The method of claim 21, further comprising washing the coated anode gas diffusion substrate or the ionomer membrane with water.

23. (New) A membrane electrode unit for direct methanol fuel cells obtainable by the process according to claim 14.

24. (New) A membrane electrode unit for direct methanol fuel cells obtainable by the process according to claim 21.